Symposium introduction: usable knowledge in practice

Bartels, Koen; Wittmayer, Julia

DOI:
10.1080/19460171.2014.957335

Symposium Introduction: Usable Knowledge in Practice. What Action Research has to Offer to Critical Policy Studies

Koen P.R. Bartels - Business School, Bangor University - College Road, Bangor (Gwynedd), LL57 2DG, United Kingdom - k.bartels@bangor.ac.uk

Julia M. Wittmayer - Dutch Research Institute for Transitions (DRIFT), Erasmus University Rotterdam - PO Box 1738, 3000 DR Rotterdam, The Netherlands - wittmayer@drift.eur.nl

Abstract

Critical policy analysts aim to serve policy actors in dealing with the intricate problems they face by facilitating productive communication, critical learning, and sustainable change. Action research is a valuable approach for living up to this ambition. As it is rarely used in the field of critical policy analysis, this symposium further explores what action research has to offer. In this introduction, we draw out the main principles, practices, and dilemmas of action research, provide an overview of the four contributions to the symposium, and set out an agenda for future action research. We argue that action research is a useful approach for generating reflexivity, learning, and change among the actors implicated in the problem at hand and its wider context, as well as for grasping the meaning of 'knowledge' and 'research' within current science-practice relations. At the same time, it is challenging because, in practice, it means facing the diverse, contested meanings of usable knowledge in both of these settings. Hence, we encourage future action research to further come to terms with the actual possibilities and constraints of the transformative ambitions of CPS.

Keywords: action research, methods, practice, usable knowledge, reflexivity, change

Being faced with a myriad of interrelated social, economic, political, and environmental challenges, recognition has surged that governments and their administrations are not able to address, let alone solve these on their own (Fischer 2003a, Hajer and Wagenaar 2003, Fischer and Gottweis 2012, Grin et al. 2010). The complexity of current policy issues asks for a broader knowledge base and collaboration between all those affected. At the same time, it also urges us to critically reflect on the roles, ambitions, and scope of the research we do. Approaches falling under the broad interpretive stream of Critical Policy Studies (CPS) aim to serve (policy) actors in dealing with the intricate problems they face by facilitating productive communication, critical learning, and sustainable change (Hoppe 1999, Fischer 2003b, Wagenaar 2011). As attested by an earlier symposium in this journal (Wagenaar 2007), action research is a valuable approach for living up to this ambition, yet is rarely used by critical policy analysts[1]. Therefore, in this symposium, four reports of recent action research projects further explore the principles, practices, and dilemmas of action research.

By action research we refer to *participatory processes of collaborating with (policy) actors to produce scientifically and socially relevant knowledge and transformative action. These processes and their outcomes actively address pressing real-life problems by enabling empowerment, emancipation, sustainability, and democracy*. As the experiences of the researchers in this symposium show, action research is both a useful and challenging approach. On the one hand, it is useful for generating reflexivity, learning, and change amongst the (policy) actors and researchers implicated in the problem at hand and its wider context, as well as for grasping the meaning of 'knowledge' and 'research' within current science-practice relations. At the same time, it is challenging because, in practice, action research means facing the diverse, contested meanings of usable knowledge in both of these settings. This means that researchers and (policy) actors face identity costs, struggles over

[1] Besides the three articles part of the 2007 symposium, a search in Web of Science (24-04-2014) learns that since 1975 only 60 articles reporting action research findings have been published in the broader areas of policy studies, planning, and public administration.

truth and validity, and pressures for instrumentalization. Taken together, this makes action research into arguably the best approach available for coming to terms with the actual possibilities and constraints of the transformative ambitions of CPS.

What Action Research Has to Offer: Ambitions, Potential, and Constraints

Action research forms a broad heterogeneous research field rather than a unified approach. Its origins can be traced back to the work of Kurt Lewin and the industrial democracy tradition that originated in the USA in the 1930's and took foot in Europe after the Second World War, as well as to the liberationist work of Paulo Freire in the 1970's and what is referred to as 'human inquiry' by Peter Reason in the 1980's. Due to these competing historical strands, action research is characterized by a diversity of philosophical stances and competing conceptions of what constitutes science, translating in different epistemological and ontological positions. As such, action research spans approaches to collaborative research from different traditions, such as political economy, pragmatic philosophy, community development, education, and participatory rural development (see e.g., Dick 2004, Cassell and Johnson 2006, Reason and Bradbury 2008).

Hence, action research is a "family of approaches" (Reason and Bradbury 2008, p. 7), something mirrored in the contributions to this symposium. Bonetti and Villa, for example, call action research a "scientific toolbox to explicitly deal with the idea of a non-neutral relationship between social science and society", when the stakes are high and inclusion needs to be facilitated. Boezeman et al. understand action research as "a collaborative learning process" that helps practitioners to decide what to do by enhancing their understanding of multiple views on the situation and courses of action. Similarly, Westling et al., who prefer to speak of "collaborative research", stress its value for provoking reflexivity

by creating "a space for opening up questions, debate, assumptions and for discussing differences". Wittmayer et al., finally, present "the community arena" as an action research approach that can support communities in "addressing societal challenges and making sustainability meaningful locally".

[TABLE 1 ABOUT HERE]

As can be seen in table 1, the researchers engaged in a variety of methods and practices in their action research. There is strong overlap in the use of data collection methods (e.g., participant observation, qualitative interviews, document analysis, diary keeping) and collaborative methods (e.g., forming a steering group, organizing meetings, discussing findings, renegotiating remit). However, each project was characterized by its own context-based mix of methods (including less regularly used methods like surveys, or organizing projects)[2].

In general, these approaches have three elements in common: action, research, and participation (Greenwood and Levin 2007). *Action* refers to the real-world change that the researchers and participants aim for by acting upon the problem at hand: "it *transforms the world* and *transforms us*" (Kemmis 2010, p. 423, emphasis in original). *Research* refers to new knowledge that is generated. All of this happens in a *participatory* way, by opening or constructing 'communicative spaces' (Reason and Bradbury 2008) or 'arenas for dialogue' (Greenwood and Levin 2007) through which to produce 'a better future' (Gaya Wicks et al. 2008). Action researchers share a commitment to democratic social change (Brydon-Miller et al. 2003) and their practice bears the promise of transformation on a local and societal level.

[2] This table is not comprehensive of all action research methods. Some methods not used by the researchers contributing to this symposium are shadowing, living in the area or working for the organization, and visual or sensory analysis.

Moreover, action research operates not only within the situated context of a real-world problem, but also on the boundaries of research and practice, challenging these in both directions. Action research has not had an easy relationship with mainstream science and has always been practiced on its margins. Similar to critical theory it blurs the traditional division between objectivity and subjectivity and seeks "to empower research subjects to influence decision making for their own aspirations" (Bradbury and Reason 2003, p. 157). As the boundaries between researchers and practitioners, as well as between research and action, are often blurred, action research requires different quality standards than conventional approaches to science (see e.g. Reason and Bradbury 2008, Heikinnen et al. 2007). This may lead to substantial tensions when researchers aim to meet not only the expectations of those involved in the research project but also those of their own peers and the wider scientific community.

Given these tensions, action researchers seek to produce 'actionable', or 'usable', knowledge: *knowledge that is critical of the status quo in policy practice* and *academic research and is simultaneously used to act upon the problem(s) at hand and to advance academic debate*. It is theoretically informed, yet practical understanding and activity which is grounded, negotiated, critical, democratic, and contextual (see also Bartels 2012). Knowledge is actionable when it meets the criteria of *workability* (how well the initial problem is solved) and *credibility* (how well the workability is explained), and *reflexivity* (how well the practices, context, and process of knowledge generation and action are critically examined) (Greenwood and Levin 2007, Reason and Bradbury 2008, May and Perry 2013). It is *un*actionable when participants cannot recognize or act upon their co-produced knowledge, participants do not (see the need to) reflect upon or change any of their habitual practices or broader systems, or the relation between research and practice is not reflected upon (see Argyris 2004, Loeber 2007).

However, in practice "the aspirations and ideals of action research are difficult to live up to" (Phillips 2011, p. 85). Although the action research literature provides countless remarkable and inspiring cases of collaborative knowledge production, enhanced reflexivity, and positive change, no project goes without dilemmas, tensions, disappointments, frustrations, or contestations (Dick 2004, Reason and Bradbury 2008, Phillips 2011). Action researchers can get embroiled in conflicts between powerful stakeholders, run aground in rigid organizational systems, be dependent on conventional funding criteria, or fail to achieve the degree or kind of change they aspired to. This is due to both the complexity of its endeavor in daily practice as the constraints of its institutional context. Indeed, over the past decades action researchers have grown increasingly skeptical about the role of universities and academic research in the 'knowledge economy' in which "spaces for critical reflection are being squeezed, squashed and diminished" (May and Perry 2013, p. 112). Nonetheless, action research plays an important role in revealing and criticizing these conditions.

The Tightrope of Actionable and Instrumentalized Knowledge

It seems to us, then, that action research neatly fits in with CPS: it acts upon and explores the limits of providing actionable knowledge. So how can it be that action research is hardly used in CPS? Following Wagenaar (2007), an important explanation seems to be that much interpretive research is grounded in "meaning realism", the epistemological notion that meanings are out there ready to be discovered by external observers. In this monological approach to meaning, critical policy analysts capture the meaning of (inter)subjective experiences by registering social behavior and individual self-understandings (which they either credulously reproduce or cast in a critical framework), while positioning themselves outside of the meaning-making processes and the real world problem at hand.

In contrast, a dialogical approach to meaning implies engaging in a relational process of coming to an understanding by experiencing the issue at hand in everyday practice. Understanding is not a method or a separate activity;

> everyday experience, and the processes by which it emerges in interaction with the world and by which it gets recognized and accepted as right or doubtful, [is] both the source and the standard of insight into the structure and functioning of the social world (Wagenaar 2007, p. 319).

Although a dialogical approach opens the door to producing actionable knowledge, it is also a more risky approach because it does not offer the (illusory) certainty and control of monological methods and poses intellectual, emotional, social, and ethical "identity costs" (Wagenaar 2007, p. 323). It confronts researchers with contestations of their methods and findings, direct feedback on their efforts to encourage reflexivity, social and financial pressure on their integrity, and selective use of the research findings by various actors for their own gain or in ways that the researchers could foresee nor control. Hence, this symposium further explores the diverse meanings of 'actionable' knowledge in practice, reflecting on the actual ways in which action researchers walk the tightrope between actionable and instrumentalized knowledge.

The four action research projects in this symposium originate from different theoretical, methodological, geographical, and policy backgrounds. However, the double-edged dynamics and outcomes of these projects turned out to be of remarkable similarity. On the one hand, embarking on action research offered exceptional opportunities for generating socially and scientifically relevant knowledge by collaborating with (policy) actors in addressing the real-world problems they faced. The action researchers were in a position to

experience how the problems in practice defied pre-conceived theoretical frameworks, to bring about reflection on, and change of engrained modes of conduct, and to manage complex systems of beliefs, relationships, and power. As a common bottom-line, all projects aimed to instil a certain sense of reflexivity into the daily practices of research participants: by interviewing, organizing workshops, creating a shared future or common goals, or sharing critical analyses.

On the other hand, in all projects the action research was subjected to pressures of instrumentalization: (policy) actors regularly used the research as an instrument to benefit their own self-interests and power, rather than using it to engage in processes of joint inquiry, learning, and change of the world for the common good. Although this happened to different degrees and for diverging reasons, the action researchers often felt constrained by one-sided notions of "usable" knowledge among (policy) actors and struggled to retain their integrity and identity as researchers as well as promote sustainable transitions.

In the first article, Boezeman, Vink, Leroy, and Halffman (this issue) report 2.5 years of action research on the Dry Feet 2050 project. The goal of this project was to promote collaboration and participation in water governance in the North of the Netherlands. The researchers stimulated the participants to develop their knowledge of, and reflect on, which stakeholders to include and what participatory methods to use. The action research stumbled upon several barriers to genuine collaborative learning and participation: diverging stakes of actors, a strongly institutionalized science-policy interface, and the pressure of imminent decision making. These barriers not only instrumentalized the Dry Feet project to the purposes of the most powerful actors, but also frustrated efforts by the researchers to stimulate double loop learning. As a result, both stakeholder participation and the action research project did not live up to their initial ambitions. However, the authors do show that a

small transformation was achieved and offer valuable reflections on their role as researchers with regards to pressures of instrumentalization.

This experience is a very clear warning that instrumentalization can occur despite the best intentions of both participants and researchers. The participants invited the researchers to help them to prevent the Dry Feet project from failing like its predecessor. The researchers designed an interpretive and adaptive approach aimed at enhancing the quality of the collaborative process. However, the aforementioned barriers to inclusive collaboration and genuine participation proved to be too strong for a transition to occur either in Dutch water management or its relationship with research. The paper raises the question, then, whether and how the dialogical methods that action research has to offer generate usable knowledge, learning, and change, while avoiding instrumentalization. The subsequent articles further explore this question in terms of, respectively, the challenges of collaborative research, the constraints of bureaucratic legalism, and the sustainability of local transitions.

In the second article, Westling, Sharp, Rychlewski, and Carrozza (this issue) describe and reflect upon an interpretive approach to collaborative research on climate change adaptation in the British water industry. The authors were involved in an EU-funded research project that, amongst others, aims to support European urban utilities in developing adaptive tools, knowledge, and learning materials to manage water supply and sanitation systems. Initially, the research project was framed in an 'engineering terminology' putting forth a reductionist and linear approach to science. The authors, interpretive social scientists, describe how they introduced reflexivity into the research process by creating arrangements for "opening up" and "closing down" reflexive processes. In doing so, they encountered challenges with regards to (1) the undesirability of value pluralism within organizations, (2) the legitimacy of reflexive knowledge, (3) their integrity as interpretive researchers, and (4) the fit with organizational goals and agendas. By highlighting these dimensions of "making

things less comfortable", this article offers helpful lessons to researchers and practitioners who (aim to) engage in collaborative research and facilitate reflexivity in a positivist field of practice.

We need to be aware of how the content, methods, and value of action research are negotiated and adapted through collaboration between researchers and practitioners. As maintaining this collaboration is crucial to the continuation of the research, action researchers need to be cautious in challenging established practices, at times having to make uncomfortable concessions themselves. While action research encourages the participants to adopt a reflexive mode of working, the further this approach and its outcomes deviate from their habitual practices and comfort zones, the further it decreases the chance that they will perceive the research as useful and fundable. Hence, as action researchers we need to adapt our ambitions for usable knowledge and reflexivity within the structural constraints in which these are translated and realized on the other. As this process can be uncomfortable for both researchers and participants, we need to constantly balance relationships and demands with our personal integrity.

In the third article, Bonetti and Villa (this issue) discuss the reform of the social welfare system in the Italian Region of Tuscany, and the action research conducted to enable change, participation, and reflexivity. The reform was aimed at creating a collaborative network of (semi-)public agencies and facilitating citizen participation. The Region commissioned the research, because it sought procedures and tools to render the already faltering network more effective. Although the researchers managed to convince the Region to adopt action research as to enhance reflexivity on divergent views, experiences, and emotions, officials' strongly resilient legalistic practices frustrated both the reform and the action research. The network faced a rapidly decreasing number of participants and level of enthusiasm, as (1) new legal rules restricted the autonomy of the participatory bodies, (2)

participation was managed according to pre-set and rigid goals and procedures, and (3) participation was deprioritized in the context of the economic crisis. As the action researchers struggled to engage the disillusioned stakeholders in a process of joint inquiry, they at least managed to reveal the detrimental effects of the legalistic and instrumental approach to participation, as well as enhance some reflexivity and change.

Participation is a popular subject among interpretive analysts. Many studies show that participatory rhetoric and practice are often miles apart, especially in a legalistic system as in Italy. Action research can help to reveal and mitigate this undesirable tendency, but at the same time runs the risk of falling victim to the technocratic mode of governing through which participatory reforms are implemented and smothered. The authors draw attention to the relevance and risks for action researchers in taking on a bureaucratic behemoth and provide perspective on what changes are reasonable within a single project entrenched in a governance system historically resistant to fundamental transitions.

In the fourth article, Wittmayer, Schäpke, van Steenbergen and Omann (this issue) discuss whether and how action research enables researchers to support sustainability transitions in local communities. The obvious issue with aiming for transitions in communities is how small, local changes translate into long-term sustainable changes of a societal system. The authors developed and experimented with what they call "the community arena methodology" as a way to address transitions in local communities. They report how this approach helped to discover how sustainability acquires meaning in the context of local communities as contextualized answer to societal challenges, and to stimulate a transition in them. In both the cases of Carnisse (a deprived neighborhood in the Dutch city of Rotterdam) and Finkenstein (a more rural area in Austria), the local communities were facing issues which made residents feel powerless in changing their living environment towards a better (more sustainable) future. The research teams helped the residents to

reimagine their future, as well as their own role in realizing that future, and supported them to advance it with practical activities. The article demonstrates how action research enables us to create and maintain an interactive space in which new ideas (future visions), practices (practical experiments), and social relations can emerge and promote sustainability transitions.

Action research is about enabling change. This article offers a perspective on what local changes an action research can facilitate and how sustainable these changes are. Transitions, understood as 'fundamental changes' of structures, cultures, and practices of entire societal systems, can take up to 25-50 years, while an action research project tends to stretch out over a period of a few months within local communities or specific organizations. Nevertheless, action research methods and practices can help to produce small yet significant changes by inducing reflexivity and enabling new activities, while constantly reflecting upon, and adapting to, the dilemmas and challenges involved with changing participants' habits and understandings as well as the systemic constraints of the broader context. Although an adaptive method as the community arena is vulnerable to instrumentalization, both cases demonstrate how individual interests and agendas can actually merge with broader societal interests. Although we cannot be certain about the emergence of a sustainable future, action research is arguably the best way for addressing the struggles involved with sustainability transitions.

Actionable Knowledge in Practice: An Action Research Agenda

Generating actionable knowledge in practice turns out to be much more diverse, contested, and problematic than implied in the CPS ambition for producing it. What knowledge action research produces and how it is used emerges from the push and pull between the critical and

democratic ambition to collaborate with (policy) actors in addressing pressing problems on the one hand, and conventional and instrumental understandings of the nature of knowledge and the purposes of research on the other. In a way, this tension is hardly surprising. Much of the debate in science and technology studies, evidence based policy making, and participatory action research gravitates around the institutional pressures, languages, and practices pushing and pulling the worlds of researchers and societal actors (see e.g., Hoppe 2005). Critical policy analysts cannot get around negotiating the substantive focus, findings, and implications of their research with (policy) actors.

However, this symposium shows that action research has a lot more to offer to CPS than collaborating on solutions to today's social, economic, political, and environmental challenges. More than any other methodological orientation, it carries the related challenge of negotiating the meaning of 'knowledge' and 'research' as well as the process through which its aims, methods, and impact are co-produced. Hence, action research helps us to grapple with usable knowledge in practice in terms of:

1. the daily practices and social dynamics involved with generating reflexivity, learning, and change;
2. the actual contextual possibilities and constraints of the ambitions, roles, relationships, and spaces shaping the research process; and
3. the tensions between science and practice with regards to what is considered "usable" research and knowledge.

This symposium offers a preliminary understanding of the nature and implications of the tensions stirred up by action research. Future studies should further explore how action researchers walk the tightrope of actionable and instrumentalized knowledge and how they negotiate possibilities and constraints of co-producing actionable knowledge and

transformative action in everyday practice. Attention should in particular be given to the relationships, experiences, and new roles implicated in creating and sustaining relational and reflexive spaces, discovering our identities as researchers and individuals, and promoting sustainable transitions of power-ridden, legalistic, and conservative policy settings. More specifically, we encourage critical policy analysts to report their experiences with the following issues and questions:

- *Instrumentalization*: how does instrumentalization come about and how can we negotiate it?
- *Critical role*: how can we remain critical while having entered into relationships of trust and interdependence?
- *Ambitions*: how should we set and sell our ambitions for inducing reflexivity, learning, and change when we are bound to be confronted with power inequalities, instrumentalization, and frustration?
- *Integrity*: how can we stay loyal to our principles and ambitions as critical policy analysts while also making the research useful to those participants who resist learning and change and/or decide about support and funding for the research?
- *Identity:* how much should we invest in accommodating the opinions, feelings, interests, and powers of research participants and our relationships with them?
- *Competences:* in which ways can we manage the mental and emotional fatigue that we and the research participants experience as we are confronted with diverse worldviews, power struggles, and rigid institutional contexts?
- *Time*: what are realistic time scales for generating change and influencing transitions?
- *Spaces*: how can our work in relatively small (relational) spaces generate change in broader societal systems?

- *Systems*: how can we stimulate transitions in systems which are not conducive to learning and change?
- *Theorizing*: how does action research help us in theorizing about how to enable change in other settings?
- *Evaluation*: how can we assess whether our research has generated actionable knowledge and made a sustainable contribution?

In conclusion, further debate on these issues and questions should not only improve our understanding of what action research has to offer to critical policy studies, but eventually also of what critical policy studies has to offer action research. Based on this symposium, we expect this contribution will be to bring critical views, innovative collaborative activities, and reflexive practices to an ambitious and change-oriented methodological field.

Acknowledgements

This symposium is an outcome of a panel organized at the 8th Annual Conference in Interpretive Policy Analysis, Vienna, 3-5 July 2013. We would like to thank the panel participants for their enthusiasm and input and greatly appreciate the editorial support we received in realizing this symposium. We are grateful to Richard Freeman, Tim May, and the symposium participants for their comments on earlier versions of this article.

References

Argyris, C., 2004. *Reasons and rationalizations: The limits to organizational knowledge.* Oxford: Oxford University Press.

Bartels, K. P. R., 2012. The actionable researcher: Cultivating a process-oriented methodology for studying administrative practice. *Administrative Theory & Praxis,* 34 (3), 433-455.

Bradbury, H. and Reason, P., 2003. Action research. An opportunity for revitalizing research purpose and practices. *Qualitative Social Work,* 2 (2), 155-175

Brydon-Miller, M., Greenwood, D., and Maguire, P., 2003. Why action research? *Action Research,* 1 (1), 9–28.

Cassell, C. and Johnson, P., 2006. Action research: Explaining the diversity. *Human Relations,* 59 (6), 783–814.

Dick, B., 2004. Action research literature themes and trends, *Action Research,* 2 (4), 425-444.

Fischer, F., 2003a. Beyond empiricism: Policy analysis as deliberative practice. *In:* M.A. Hajer and H. Wagenaar, eds. *Deliberative policy analysis. Understanding governance in the network society*. Cambridge: Cambridge University Press, 209-227.

Fischer, F., 2003b. *Reframing public policy. Discursive politics and deliberative practices.* Oxford: Oxford University Press.

Fischer, F. and Gottweis, H., eds., 2012. *The argumentative turn revisited: Public policy as communicative practice.* Durham, NC: Duke University Press.

Gaya Wicks, P., Reason, P. and Bradbury, H., 2008. Living inquiry: Personal, political and philosophical groundings for action research practice. *In:* P. Reason and H. Bradbury, eds. *The handbook of action research.* London/Thousand Oaks, CA: Sage, 15-30.

Greenwood, D.J. and Levin, M., 2007. *Introduction to action research. Social research for social change.* 2nd ed. Thousand Oaks, CA: Sage.

Grin, J., Rotmans, J., Schot, J., Loorbach, D., and Geels, F.W., 2010. *Transitions to sustainable development: New directions in the study of long term transformative change*. Routledge: New York.

Hajer, M.A. and Wagenaar, H., eds., 2003. *Deliberative policy Analysis. Understanding governance in the network society*. Cambridge: Cambridge University Press.

Heikkinen, H.L.T., Huttunen, R., and Syrjälä, L., 2007. Action research as narrative: five principles for validation. *Educational Action Research*, 15 (1), 5-19.

Hoppe, R., 1999. Policy analysis, science, and politics: From 'speaking truth to power' to 'making sense together'. *Science and Public Policy*, 26 (3), 201-210.

Hoppe, R., 2005. Rethinking the science-policy nexus: From knowledge utilization and science technology studies to types of boundary arrangements. *Poiesis & Praxis*, 3 (3), 199-215.

Kemmis, S., 2010. What is to be done? The place of action research. *Educational action research*, 18 (4), 417-427.

Loeber, A., 2007. Designing for phronèsis: Experiences with transformative learning on sustainable development. *Critical Policy Studies*, 1 (4), 389-414.

May, T., and Perry, B., 2013. Reflexivity and data analysis. *In:* U. Flick, ed. *Handbook of qualitative data analysis*. London: Sage, 109-122.

Phillips, L.J., 2011. Analysing the dialogic turn in the communication of research-based knowledge: An exploration of the tensions in collaborative research. *Public Understanding of Science*, 20 (1), 80-100.

Reason P, Bradbury, H., 2008. Introduction: Inquiry and participation in search of a world worthy of human aspiration. *In:* P. Reason and H. Bradbury, eds. *The handbook of action research*. London/Thousand Oaks, CA: Sage, 1–14.

Wagenaar, H., 2007. Philosophical hermeneutics and policy analysis: Theory and effectuations. *Critical Policy Studies*, 1 (4), 311-341.

Wagenaar, H., 2011. *Meaning in action. Interpretation and dialogue in policy analysis*. Armonk, NY: M.E. Sharpe.

Author biographies

Koen Bartels is Lecturer in Management Studies at Bangor University (United Kingdom), where he teaches courses in public administration and qualitative research. His research interests are social and democratic innovation, urban governance, participatory democracy, practice, communication, sociology of knowledge, and interpretive policy analysis. He has published in various leading public administration and public policy journals and has a book forthcoming with The Policy Press entitled 'Communicative Capacity: Public Encounters in Participatory Theory and Practice'.

Julia Wittmayer is a senior researcher at DRIFT (Erasmus University Rotterdam, the Netherlands) with a background in Social and Cultural Anthropology. She is mainly working on social innovation and social sustainability in urban areas and on local scale. Her research interests include the roles, social relations, and interactions of actors involved in transition processes and initiatives; research at the science-society interface; and methodological concerns with regards to participatory, transdisciplinary, or action research.